

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION II

DATE:

MAY 11 2006

SUBJECT: Shieldalloy Superfund Site, Draft Perchlorate Remedial Investigation Work Plan  
Newfield, New Jersey

FROM: William Sy Chemist *WS*  
Hazardous Waste Support Section (2DESA-HWSB)

TO: Trevor Anderson, Remedial Project Manager  
Southern New Jersey Remediation Section (2ERRD-NJRB)

I have reviewed the Draft Perchlorate Remedial Investigation Work Plan for the Shieldalloy Superfund Site, located in Newfield, New Jersey. The document was prepared by TRC Environmental Corporation for Shieldalloy Metallurgical Corporation. The plan was received by HWSS on April 20, 2006. My comments are attached.

I would appreciate receiving a copy of your correspondence transmitting EPA's comments on the above mentioned plan. If you have any questions or require further information, please contact me at (732) 632-4766.

Attachment.

cc: Kimberly O'Connell, 2ERRD-NJRB

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**Shieldalloy Superfund Site  
Newfield, New Jersey**

**Remedial Investigation Work Plan Comments**

1. The Remedial Investigation Work Plan (RIWP) did not contain an approval signature page to indicate that the document went through a review and approval process conducted by TRC Environmental Corporation and Shieldalloy Metallurgical Corporation prior to its submittal to EPA.
2. Since EPA Region 2 has adopted the *Uniform Federal Policy for Implementing Environmental Quality Systems* (EPA 505-F-03-001), the QA/QC program for the project should follow the requirements provided in the referenced document. Site specific project documentation such as the field sampling plan, quality assurance project plan or similar documents (incorporating site-specific Data Quality Objectives or DQOs) should be documented following the *Uniform Federal Policy for Quality Assurance Project Plans (UFP-QAPP) Parts 1, 2A and 2B* (EPA 505-B-04-900A, B and C). OSWER Directive 9272.0-17 provides information on implementing the UFP-QAPP. These documents are available at <http://www.epa.gov/fedfac/documents/qualityassurance.htm> (last accessed on 5/11/06) and are consistent with *EPA Requirements for Quality Assurance Project Plans* (QA/R-5, EPA 240-B-01-003).
3. Section 1.0 Introduction, page 1-1 – It was stated that if the field conditions cause a change in the RIWP, the NJDEP Field Sampling Procedures Manual will be used as a guide. The procedures and/or process including documentation requirements used to make any changes to the RIWP were not provided.
4. Section 1.1 Purpose, page 1-1 – The project provided a remediation standard of 5 ppb for groundwater but did not include any information as to the decision criteria that will be used for the soil, sediment and surface water. This information is required in order to be able to specify the appropriate analytical method(s) for these matrices.
5. Section 1.3 Scope of Work, page 1-3 – One of the stated scopes of work for the project is to assess the analytical data collected. No additional information was provided on the assessment process that will be used.
6. Section 3.2 Soil RI, page 3-4 – It was stated that the drilling contractor will drive 1-inch hollow tubes into a pre-identified interval of interest or up to depths immediately above the water table. However, no reference or additional information was provided on how these levels were pre-identified. It was also stated two grab sub-samples will be collected in each 4-foot macro-core sampler. The rationale or the sampling design used to determine the sub-sampling scheme should be provided.

At the bottom of the page, one of the sample selection criteria is that the second sample that will be collected from the macro-core will be based on the vertical variability of samples within each AOC. An explanation of what constitute the vertical variability of samples should be provided. Additional information should also be provided to elaborate using this sample selection criteria as part of the sampling design information requested in the previous paragraph.

7. Section 3.3 Ground Water RI, page 3-7 – For the monitoring well installation, it was not clear what mechanism will be used to consult with NJDEP prior to installation of the monitoring wells using the perchlorate data from the direct push sampling program. Information should be provided if this consultation entails providing NJDEP with a report and obtaining NJDEP's concurrence prior to monitoring well installation. The roles and responsibilities of personnel from different regulatory agencies, the PRP and its contractors should be clearly identified in project organization section of the RIWP.
8. Section 6.3.1 Existing Monitoring Wells, page 6-3 – Regulatory approval should be obtained in order to discharge purge water onto the ground surface adjacent to the wells.

On page 6-4, it was stated that a presterilized Nalgene® bottle will be used for the groundwater samples. However, the volume required to be collected in this container was not specified. For the surface water samples and the vertical profile well samples, it was unclear if the field sample preparation and preservation procedures specified for the groundwater will be followed. If the same procedures will not be used, the rationale for doing so should be provided.

9. Section 8.0 Analytical Procedures, page 8-1 – The cited reference for the perchlorate analytical method is EPA SW-846, which is a compendium of methods published by the Office of Solid Waste. EPA Method 314.0 as proposed for this project was developed by the EPA's Office of Ground Water and Drinking Water and is not available in EPA SW-846. This reference should be corrected.
10. Section 8.2 Laboratory Procedures, page 8-1 – The current certification for the selected laboratory should be provided and should apply to the analytical method and matrices of concern for the project. As an alternative, the laboratory can submit the results of PE samples for the matrices and analyses to be conducted from within the past six months.
11. Section 9.1 Field Blanks, page 9-1 – Similar to the second comment in item #8, it was not clear if the field preparation and preservation procedures of the field blanks associated with surface water and vertical profiling samples will be similar to the field blanks associated with the groundwater samples. If different, the basis for using dissimilar procedures should be provided.
12. Section 9.7 Laboratory Deliverables, page 9-4 – Aside from the internal review conducted by the laboratory, there is no external data validation being proposed. Provide the rationale for not performing an independent third-party validation.

13. Section 10.1 Remedial Investigation (RI) Report, page 10-1 – It was stated that the RI Report will include an interpretation of the extent of perchlorate contamination in the various media sampled. However, the RIWP did not include any information on any data usability assessments that will be performed. It is not clear what criteria will be used to complete this data interpretation. Refer to the guidance documents cited in item #2 for properly documenting the assessment, evaluation and usage of the data typically generated for an environmental project.